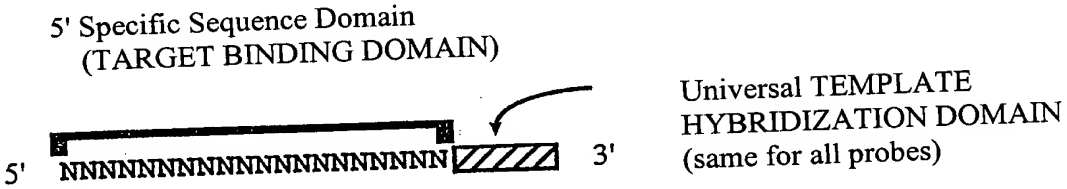
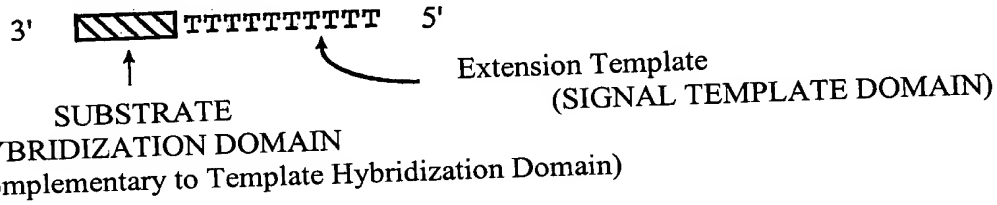
APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

A) Design and Synthesis of Nucleic Acids (oligonucleotides):

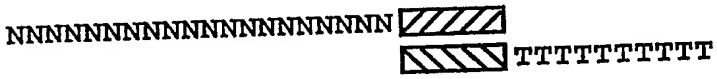
i) *Substrate Nucleic Acid*



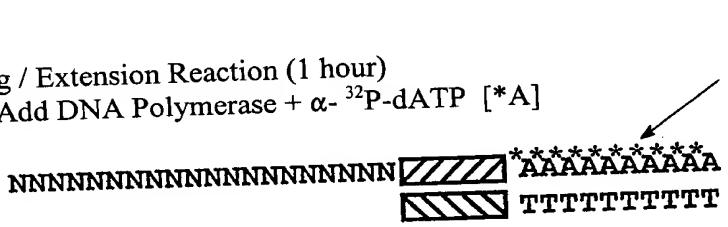
ii) *Template Nucleic Acid*



B) Anneal Substrate + Template Nucleic Acids in Buffer (10 minutes)



C) Labeling / Extension Reaction (1 hour)
Add DNA Polymerase + α- ^{32}P-dATP [*A]

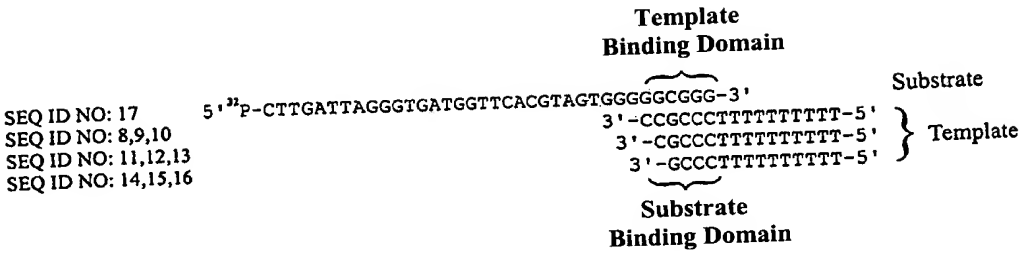


D) Remove Unincorporated Label using Column Chromatography (10 minutes)
Optional: Remove Template and more highly purify Probe using PAGE (2 hour gel + elute)

FIG. 1

APPROVED O.G. FIG.
BY
DRAFTSMAN
CLASS
SUBCLASS

A) Substrate and Template Nucleic Acids



B) PAGE analysis of reaction products

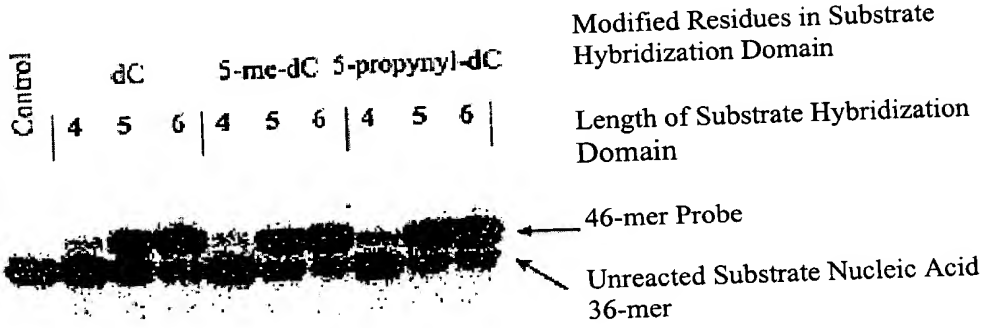


FIG. 2

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

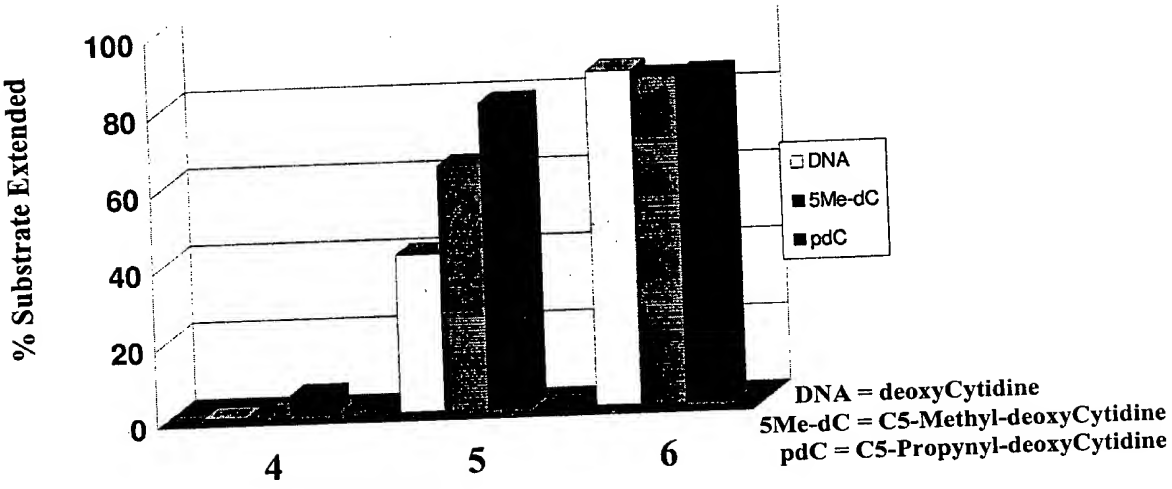


FIG. 3

APPROVED O.G. FIG.
BY
DRAFTSMAN
CLASS
SUBCLASS

pGreen Lantern™-1 Probes

Kinase Labeled Probe

5'^{32}P-CTTGATTAGGGTGATGGTTCACGTAGTGGGGGCGGG-3'

High Specific Activity Tailed Probe

5'-CTTGATTAGGGTGATGGTTCACGTAGTGGGGGCGGG*A*A*A*A*A*A*A*A*A*A-3'

* = ^{32}P (10 total)

FIG. 4A

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

Dot Blot

Mass of target plasmid on Membrane

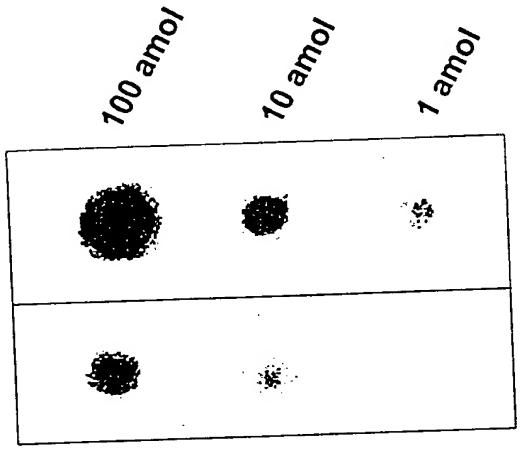


FIG. 4B

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

β-Actin Probes

Kinase Labeled Probe

5'^{32}P-GCCCAGGAAGGAAGGCTGGAAGAGTGCCTCGGCGGG-3'

High Specific Activity Tailed Probe

5'-GCCCAGGAAGGAAGGCTGGAAGAGTGCCTCGGCGGG*A*A*A*A*A*A*A*A*A*A-3'

* = ^{32}P (10 total)

FIG. 5A

APPROVED O.G. FIG.
BY
DRAFTSMAN
CLASS
SUBCLASS

Northern Blot of Human Placental RNA

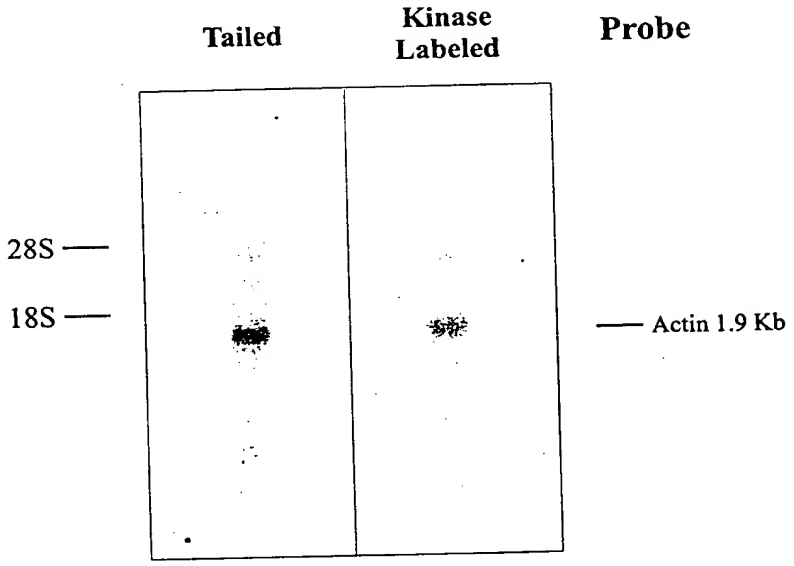


FIG. 5B

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

Substrate Nucleic Acids and Reaction Products

SEQ ID NO: 21 DNA Substrate Nucleic Acid

5'^{32}P-GCCCAGGAAGGAAGGCTGGAAGAGTGCCTCGGCGGG-3'

SEQ ID NO: 22 DNA Reaction Product

5'^{32}P-GCCCAGGAAGGAAGGCTGGAAGAGTGCCTCGGCGGGAAAAAAAAAA-3'

SEQ ID NO: 24 RNA Substrate Nucleic Acid

5'^{32}P-cugggcauggaguccuguggcauccacgaaacuaccuucaggcggg-3'

SEQ ID NO: 25 RNA Reaction Product

5'^{32}P-cugggcauggaguccuguggcauccacgaaacuaccuucaggcgggAAAAAAAAAA-3'

FIG. 6A

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

PAGE analysis of Reaction Products

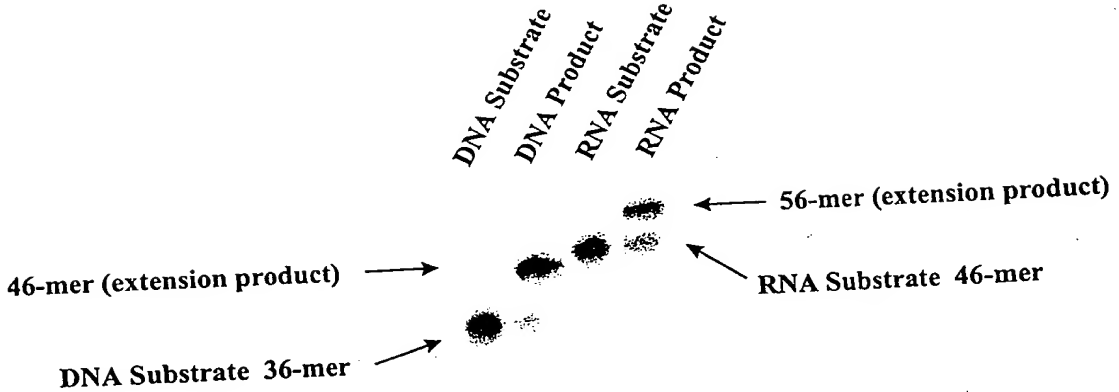


FIG. 6B